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DEPARTMENT OF THE NAVY
NAVAL FACILITIES
ENGINEERING COMMAND
GUIDE SPECIFICATION
SHORT FORM

NFGS-SF-16723B
30 September 1999

Superseding NFGS-SF-16723A (09/98)

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SECTION TABLE OF CONTENTS

DIVISION 16 - ELECTRICAL

SECTION 16723

INTERIOR TELEPHONE SYSTEM

09/99

-- End of Section Table of Contents --

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INTERIOR TELEPHONE SYSTEM

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Preparing Activity: NAVFACENGCOMHQ (CODE 15G)

Typed Name & Reg.	Signature	Date
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Approved for NAVFAC: Carl E. Kersten, R.A.	/s/	09/30/98

Any changes or revisions to this document since the date of the original approval for NAVFAC, have been performed by the Guide Specifications Division (Code 15G).

Changes or Revisions		
Approved for NAVFAC: Carl E. Kersten, R.A.	/s/	09/30/99

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AMSC N/A AREA FACR

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SECTION 16723

INTERIOR TELEPHONE SYSTEM
09/99

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NOTE: This Short Form Guide Specification is for use in preparing project specifications for small projects, repair or maintenance work. It may also be used for minor elements or small quantities of work in larger projects at the discretion of the Engineer/Architect in charge. If a more detailed specification is required, use the NFGS series of specifications.

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NOTE: This short form guide specification covers the requirements for interior telephone distribution system.

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NOTE: This revision "B" to NFGS-SF-16723 amends the issue dated 30 September 1998 by revising the submittal article to comply with the agreement reached by the SPECSINTACT Tri-Agency Committee.

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PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

INSULATED CABLE ENGINEERS ASSOCIATION (ICEA)

ANSI/ICEA S-80-576	(1994) Communication Wire and Cable for Wiring of Premises

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(1999) National Electrical Code

RURAL UTILITIES SERVICE (RUS)

RUS 345-52	(1980) Service Entrance and Station Protector Installations (PC-5A)
RUS 345-78	(1980; Supp. 1980) Carbon Arrestor Assemblies for Use in Protectors
RUS 1755I-100	(1993) List of Materials Acceptable for Use on Telephone Systems of REA Borrowers

1.2 SUBMITTALS

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NOTE: Where a "G" in submittal tags follows a submittal item, it indicates Government approval for that item. Add "G" in submittal tags following any added or existing submittal items deemed sufficiently critical, complex, or aesthetically significant to merit approval by the Government. Submittal items not designated with a "G" will be approved by the QC organization.

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Submit the following in accordance with Section 01330, "Submittal Procedures."

SD-03 Product Data

Cables

Arresters

Connector blocks

Terminal blocks

SD-06 Test Reports

Insulation resistance test

Submit written copies of test results.

PART 2 PRODUCTS

2.1 TELEPHONE SYSTEM

Provide conduit system and other accessories for telephone outlets. System shall be ready for use by others who will provide the telephone switching equipment and instruments. Provide conduit system with pull wire or nylon cord for cable installation. Telephone wiring and equipment shall be listed in RUS 1755I-100.

[2.1.1 Service Backboard

Interior grade plywood, 19.05 mm 3/4 inch thick.

]2.1.2 Conduit, Outlet Boxes and Cover

Provide boxes and conduit in accordance with Section 16110, "Interior

Electrical Work." Mount box flush in finish walls at [_____] mm inches from finish floor.

[2.1.3 Cables

ANSI/ICEA S-80-576, with a minimum of [four copper pairs, [22] [24] [_____] AWG].

][2.1.4 Modular Telephone Jacks

[Four] [Six] [Eight] matching connections.

]2.1.5 Service Entrance and Station Protectors

RUS 345-52.

2.1.6 Arresters for Telephone Equipment

RUS 345-78.

2.1.7 Terminal Blocks

Provide wirewrap type for terminating line circuits, and inside cabling.

[2.1.8 Connector Blocks

Provide Series 66, four clip type, size to allow 25 percent spare pair capacity.

]PART 3 EXECUTION

3.1 INSTALLATION

3.1.1 Telephone Outlets

Surface mount telephone outlets on interior surface of exterior walls and on other masonry walls. Provide surface metal raceway from telephone outlet box to 150 mm 6 inches above suspended ceiling. Provide a junction box at that location and conduit from there to telephone backboard. Flush mount telephone outlets on other walls and partitions with [16] [21] mm [1/2] [3/4] inch conduit in interior of partition. Surface mount telephone outlets on existing walls. [Run conduit from each telephone outlet to telephone backboard.]

3.1.2 Telephone [Backboards] [and] [Cabinets]

Attach termination [backboards] [and] [cabinets] securely to building walls at each corner. [Install recessed cabinets flush with wall finishes.] [Finish paint termination backboards with durable [white] [_____] enamel prior to installation of telephone equipment.] Mark all [backboards] [and] [cabinets] with the legend "TELEPHONE."

3.1.3 [Metal Raceway] [and] [Conduit] System

Provide [metal raceway] [and] [conduit] system in accordance with Section 16110, "Interior Electrical Work."

3.2 GROUNDING

NFPA 70. Provide copper ground bus for equipment ground.

3.3 FIELD QUALITY CONTROL

Supply test equipment and personnel. Notify Contracting Officer [5] [_____] working days prior to field test.

3.3.1 Insulation Resistance Test

Perform dielectric strength and insulation resistance test of the system interconnecting wiring by means of an instrument capable of generating 500 volts dc and equipped to indicate leakage current in 1000 megohms.Perform test prior to connection of equipment.

3.4 SCHEDULE

Some metric measurements in this section are based on mathematical conversion of inch-pound measurements, and not on metric measurement commonly agreed to by the manufacturers or other parties. The inch-pound and metric measurements are as follows:

PRODUCT	INCH-POUND	METRIC
Plywood	3/4 inches	19 mm

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NOTE: Suggestions for improvement of this specification will be welcomed using the Navy "Change Request Forms" subdirectory located in SPECSINTACT in Jobs or Masters under "Forms/Documents" directory or DD Form 1426. Suggestions should be forwarded to:

Officer In Charge
Seabee Logistics Center
NAVFAC 15G/SLC 46
4111 San Pedro Street
Port Hueneme, CA 93043-4410

FAX: (805) 985-6465/982-5196 or DSN 551-5196

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